fire-resistant, and moisture-resistant backerboard sheet as may be used in areas subject to moisture and splashing. The backerboard sheet includes an autoclaved aerated concrete core having opposing first and second major surfaces, and at least one moisture-resistant face layer on at least one of the first and second major surfaces of the core.

## II. The Claims are Patentable

Claims 1-38 were rejected in view of EP 503383 and/or WO 95/11357 for the reasons set forth on pages 3-12 of the Office Action. Applicants contend that Claims 1-18, 20-28 and 54-64 clearly define over the cited references, and in view of the following remarks, favorable reconsideration of the rejections is requested.

The main references relied upon by the Examiner are EP 503383 and WO 95/11357, both of which were cited by Applicants in an IDS. EP 503383 discusses the use of aerated concrete scraps obtained from demolitions of buildings. The concrete scraps are included in the gypsum board in a concentration of 2-10% by weight. Furthermore, WO 95/11357 discloses a cement panel with aerated concrete finished on both sides with a layer of cement mortar.

Importantly, there is no discussion in either reference of using a monolithic body of autoclaved aerated concrete or a core consisting essentially of autoclaved aerated concrete, as claimed. Also, there is no teaching of a moisture-resistant resin face layer being substantially continuous and blocking moisture penetration to the core or a mositure-resistant face layer comprising fibers and a moisture-resistant resin material adjacent thereto, as

disclosed in the present application. None of the other cited references disclose this combination of features.

There is simply no teaching or suggestion in the cited reference to provide the combination of features as claimed. Accordingly, for at least the reasons given above, Applicants maintain that the cited references do not disclose or fairly suggest the invention as set forth in the independent claims. Furthermore, no proper modification of the teachings of these references could result in the invention as claimed. Thus, the rejections should be withdrawn.

It is submitted that the independent claims are patentable over the prior art. In view of the patentability of the independent claims, it is submitted that their dependent claims, which recite yet further distinguishing features are also patentable over the cited references for at least the reasons set forth above. Accordingly, these dependent claims require no further discussion herein.

### III. Conclusion

In view of the foregoing remarks, it is respectfully submitted that the present application is in condition for allowance. An early notice thereof is earnestly solicited. If, after reviewing this Response, there are any remaining informalities which need to be resolved before the application can be passed to issue, the Examiner is invited and respectfully requested to contact the undersigned by telephone in order to resolve such informalities.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current

amendment. The attached page is captioned "Version With Markings to Show Changes Made."

Respectfully submitted,

PAUL J. DITMYER

Reg. No. 40,455

Allen, Dyer, Doppett, Milbrath

& Gilchrist, P.A. 255 S. Orange Avenue, Suite 1401

Post Office Box 3791 Orlando, Florida 32802 Telephone: 407/841-2330

Fax: 407/841-2343

Attorney for Applicants

# Version With Markings to Show Changes Made

### In the Claims:

Claims 20 and 29-53 have been canceled.

The claims have been amended as follows.

1. (Amended) A backerboard sheet for moist areas and comprising:

a core having opposing first and second major surfaces;

said core comprising a monolithic body of autoclaved aerated concrete; and

at least one moisture-resistant resin face layer on at least one of the first and second major surfaces of said core, said at least one moisture-resistant resin face layer being substantially continuous and blocking moisture penetration to said core.

- 2. (Amended) A backerboard sheet according to Claim 1 wherein said at least one moisture-resistant resin face layer comprises fibers.
- 3. (Amended) A backerboard sheet according to Claim 2 wherein said fibers are arranged in a [woven] mesh.
- 4. (Amended) A backerboard sheet according to Claim 2 wherein said at least one moisture-resistant resin face layer further comprises a moisture-resistant resin

material [incorporating] adjacent said fibers.

- 5. (Amended) A backerboard sheet according to Claim 1 wherein said at least one moisture-resistant resin face layer comprises first and second moisture-resistant resin face layers on respective first and second major surfaces of said core.
- 6. (Amended) A backerboard sheet according to Claim  $\mathcal T$  wherein said at least one moisture-resistant resin face layer extends around the opposing side edges.
- 7. (Amended) A backerboard sheet according to Claim 1 wherein said core comprises <u>autoclaved</u> aerated concrete having a density in a range of about 25 to 40 lbs./ft.<sup>3</sup>
- 17. (Amended) A backerboard sheet for moist areas and comprising:
- a core having opposing first and second major surfaces;

said core comprising a monolithic body of autoclaved aerated concrete; and

at least one moisture-resistant face layer on at least one of the first and second major surfaces of said core, said at least one moisture-resistant face layer comprising [a woven fiber mesh] fibers and a moisture-resistant resin material adjacent thereto.

18. (Amended) A backerboard sheet according to Claim 17 wherein said [woven fiber mesh] <u>fibers</u> comprise[s] at

least one of glass, plastic, and metal fibers.

- 25. A backerboard sheet according to Claim 17 wherein said core comprises <u>autoclaved</u> aerated concrete having a density in a range of about 25 to 40 lbs./ft.<sup>3</sup>
- 27. A backerboard sheet according to Claim 17 wherein said core further comprises reinforcing fibers in said autoclaved aerated concrete.

New Claims 54-64 have been added.

54. (New) A backerboard sheet for moist areas and comprising:

a core having opposing first and second major surfaces;

said core consisting essentially of autoclaved aerated concrete; and

at least one moisture-resistant resin face layer on at least one of the first and second major surfaces of said core, said at least one moisture-resistant resin face layer being substantially continuous and blocking moisture penetration to said core.

- 55. (New) A backerboard sheet according to Claim 54 wherein said at least one moisture-resistant resin face layer comprises fibers.
- 56. (New) A backerboard sheet according to Claim 55 wherein said fibers comprise at least one of glass, plastic, and metal.

- 87. (New) A backerboard sheet according to Claim 55 wherein said at least one moisture-resistant resin face layer further comprises a moisture-resistant resin material adjacent said fibers.
- 58. (New) A backerboard sheet according to Claim 54 wherein said at least one moisture-resistant resin face layer comprises first and second moisture-resistant resin face layers on respective first and second major surfaces of said core.
- 59. (New) A backerboard sheet according to Claim 54 wherein the autoclaved aerated concrete has a density in a range of about 25 to 40 lbs./ft.3
- 60. (New) A backerboard sheet according to Claim 54 wherein said core has a thickness in a range of about 1/4 to 1 inch.
- 61. (New) A backerboard sheet for moist areas and comprising:

a core having opposing first and second major surfaces;

said core consisting essentially of autoclaved aerated concrete; and

at least one moisture-resistant face layer on at least one of the first and second major surfaces of said core, said at least one moisture-resistant face layer comprising fibers and a moisture-resistant resin material adjacent thereto.

- 62. (New) A backerboard sheet according to Claim 61 wherein said fibers comprise at least one of glass, plastic, and metal fibers.
- 63. (New) A backerboard sheet according to Claim 61 wherein said at least one moisture-resistant face layer comprises first and second face moisture-resistant layers on respective first and second major surfaces of said core.
- 64. (New) A backerboard sheet according to Claim 61 wherein the autoclaved aerated concrete has a density in a range of about 25 to 40 lbs./ft.<sup>3</sup>

#### CERTIFICATE OF FACSIMILE

I hereby certify that this correspondence is being sent via facsimile to: DIRECTOR, U.S. PATENT AND TRADEMARK OFFICE, WASHINGTON, D.C. 20231, at 703-872-9447 on this 22 day of October, 2002.